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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,891	12/29/2000	David M. Hoffman	15-CT-5607	9042

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EXAMINER

SUNG, CHRISTINE

ART UNIT PAPER NUMBER

2878

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/751,891

Applicant(s)

HOFFMAN, DAVID M.

Examiner

Christine Sung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9-24 and 27-29 is/are rejected.
- 7) ☒ Claim(s) 7-8, 25-26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/7/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: On page 2, line 21, "affectively" should read --effectively. Further, on page 8, line 8, "assymetric" should read --asymmetric--.

Appropriate correction is required.

Claim Objections

2. Claims 4 and 22 are objected to because of the following informalities: Claims 4 and 22 contain the phrase "adjacent two unconnected cells" but should read --adjacent to unconnected cells-- or --adjacent to two unconnected cells--. Appropriate correction is required.

3. Claims 5, 14, 15 and 23 are objected to because of the following informalities: Line 2 of claim 5, line 2 of claim 14, line 3 of claim 15 and line 2 of claim 23 contain the word "assymmetric" but should read --asymmetric--. Appropriate correction is required.

4. Claims 7-8 and 25-26 are objected to because of the following informalities: All of the claims contain the term "sloped sides." It is unclear as to the meaning of the term. Appropriate correction is required.

5. Claim 9 objected to because of the following informalities: Claim 9 has a minor typographical error in line 2 of the claim, where "calls" should read --cells--. Appropriate correction is required.

6. Claims 12 and 13 are objected to because the claims recite the limitation "said selectively connected cells." There is insufficient antecedent basis for this limitation in the claim.

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7. Claim 16 is objected to because of the following informalities: Claim 16 contains a minor typographical error in line 3 of the claim, where "comprises" should read --comprises--. Appropriate correction is required.

8. Claims 16 and 19 are objected to because of the following informalities: All of the claims contain the term "not optically coupled." The claims state that the biased pixel is *not* optically coupled to the photodiode array. However, the specification does not require nor does it disclose this particular limitation. The specification only mentions that pixels are biased but does not disclose that the pixel is not optically coupled to the photodiode array. Further it is not clear as to what is defined as being "not optically coupled." Appropriate correction is required.

9. Claim 26 is objected to because the claims recite the limitation "the sloped sides." There is insufficient antecedent basis for this limitation in the claim.

10. Claim 28 is objected to because of the following informalities: Claim 28 includes a typographical error in line 2 of the claim where "otaining" should read --obtaining--. Appropriate correction is required.

11. Claims 3, 13 and 21 are objected to because of the following informalities: All of the claims contain the term "y-direction." The y direction is not described in the specification or the drawings. It is unclear as to what is defined as the y direction with respect to the detector array elements and the detector system.

Double Patenting

12. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

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A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

13. Claims 1, 2, 4, 5, 6, 9, 10, 15, 19, 20, 22, 23, 24, 27 and 28 provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1, 2, 4, 5, 6, 9, 10, 15, 19, 20, 22, 23, 24, 27 and 28, respectively of copending Application No. 10/136,088. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

14. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

15. Claims 3, 11-14, 16-18, 21 and 29 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 3, 11-14, 16-18, 21 and 29, respectively of copending Application No. 10/136,088. Although the conflicting claims are not identical, they are not patentably distinct from each other. Regarding claims 3 and 21, the only difference is that the direction in the instant application is in the y direction, and that the copending application uses z, the direction is merely a designation. Regarding claims 11-14, the claims are materially the same because the instant application has all the limitations of the copending application, but the copending application further defines what is meant by not

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optically coupled. Regarding claims 16-18 and 29, the claims are materially the same because the instant application calls for applying a charge bias and the copending application calls for applying a voltage bias.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. US Patent 5,107,122- this reference discloses a readout method of a pixel array where only selective pixels are readout.
- b. US Patent 5,151,588- this reference discloses a radiation imaging apparatus with asymmetric detection areas.
- c. US Patent 6,396,898- this reference discloses a radiation detector that includes a scintillator and photodetector in a matrix formation about a gantry.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Sung whose telephone number is 571-272-2448. The examiner can normally be reached on Monday- Thursday 7-5 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christine Sung
Examiner
Art Unit 2878

CS



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